

REMARKS

The present application includes pending claims 1-20, all of which were rejected. By this Amendment, claim 13 has been amended. New dependent claims 21-23 have been added. The Applicant respectfully submits that the pending claims define patentable subject matter.

Claim 13 was objected to as being a substantial duplicate of claim 6. Claim 13 has been amended to correct a minor drafting error. Thus, this claim objection is now moot.

Claims 1, 4, 6 and 13 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 5,339,799 (“Kami”). Claims 2, 3, 5, 7-12 and 14-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kami. The Applicant respectfully traverses these rejections for at least the following reasons.

Claim 1 recites, in part, “a strain gauge affixed to an outer portion of said flexible engaging member, wherein said strain gauge detects movement of said operative distal tip of said flexible engaging member.” Thus, the claim is clear that the strain gauge detects movement of the operative distal tip of the flexible engaging member.

Kami discloses a medical system including a “detector or pressure sensor for detecting a state of contact between the subject and the treatment section, and a reproduction mechanism for amplifying a small contact pressure according to the output of the detector and thus reproduce the state of contact so that the surgeon can perceive the state of contact.” *See Kami at Abstract.*

The Office Action cites Kami at Figure 18 as disclosing these limitations. *See* May 28, 2008 Office Action at page 2. In particular, the Office Action cites the laser probe 122 and the strain gauge 121. *See id.* Kami does not, however, disclose that the strain gauge 121 is used to detect movement of the laser probe 122. Instead, Kami discloses the following:

Pressure sensors 125u, 125d, 125l, and 125r (125l is not shown) are installed inside the tip of the sheath 123 to detect whether the contact direction of the tip of the laser probe 122 is up, down, left, or right. A strain gauge 121 is installed to detect a pressure working when the laser probe 122 is placed on a tissue.

Kami at column 13, lines 1-6. Kami is clear that the **pressure sensors** are used to detect whether the contact direction is up, down, left, or right. However, the strain gauge is used do “detect a pressure working when the laser probe 122 is placed on a tissue.” In particular, Kami disclose the following:

In this embodiment, an output of a strain gauge 121 is assessed to **detect a pressure acting when a laser probe is in contact with a tissue.** The pressure is reproduced in fingertips to be moved by driving fingertip members 130a to 130e.

Id. at column 13, lines 24-28. While the strain gauge 121 is used to detect pressure acting when a laser probe is in contact with a tissue, Kami does not describe, teach or suggest that the strain gauge is used to detect movement of the probe. Thus, Kami does not describe, teach or suggest “a strain gauge affixed to an outer portion of said flexible engaging member, wherein said strain gauge detects movement of said operative distal tip of said flexible engaging member,” as recited in claim 1, “at least one strain gauge affixed to an outer portion of said flexible engaging member in order to detect movement of said deflectable operative distal tip,” as recited in claim 7, or “affixing a strain gauge on an outer portion of the operative distal tip of the medical instrument in order to detect movement of the operative distal tip,” as recited in claim 14. Thus, for at least these reasons, Kami does not anticipate, nor render unpatentable, any of the pending claims.

Claim 4 recites “wherein said flexible engaging member is one of a needle, catheter, curette, and K wire.” However, Figure 18 of Kami shows and describes a “laser probe 122,”

which is by no means a “needle, catheter, curette or K wire.” Thus, for at least this reason, Kami does not anticipate, nor render unpatentable, claims 4 or 12.

Claim 5 recites, in part, “at least one additional strain gauge affixed to said flexible engaging member.” Kami does not describe, teach or suggest this limitation. Indeed, the Office Action acknowledges that Kami “does not expressly teach a second strain gauge affixed to the laser probe.” *See* May 28, 2008 Office Action at page 4. However, the Office Action states that the Applicant “does not disclose that the additional strain gauge solves a particular problem, is used for a specific purpose, or presents a patentable advantage over prior art single-gauge arrangements.” *See id.* The Applicant respectfully disagrees. The specification of the present application is replete with examples of the utility and advantages of additional strain gauges. *See* present application, *e.g.*, at ¶¶ 26-30. As one example, the specification clearly states that the “flexible member 14 may also have lateral strain gauges 46 [in addition to the upper strain gauge 16 and the lower strain gauge 18] affixed thereto for providing additional information regarding lateral deflection of the flexible engaging member 14.” *See id.* at ¶ 30. Thus, for at least these reasons, the Applicant respectfully submits that Kami clearly does not anticipate, nor render unpatentable, claims 5 and 17.

Claim 7 recites, in part, “at least one of an electromagnetic, optical, inertial position, and ultrasound tracking system configured to track said medical instrument.” The Office Action cites Kami at column 19, lines 8-37 and Figure 38 as disclosing an “optical system that is capable of tracking the position of the laser probe.” *See* May 28, 2008 Office Action at page 4. However, the embodiment shown in Figure 38 of Kami does not include the laser probe. Further, the “optical system” shown in Figure 38 is “for a main unit 302 of an intraoperative

microscope.” See Kami at column 19, lines 31-32 (emphasis added). Kami does not describe, teach or suggest that this microscope tracks a laser probe. Thus, for at least these reasons, the Applicant respectfully requests reconsideration of the rejection of claims 7 and 20.

New dependent claim 21, for example, recites, in part, “wherein said strain gauge provides information regarding a location of said operative distal tip in relation to a longitudinal axis of said support member.” Kami does not describe, teach or suggest, however, a strain gauge that provides information regarding a location of an operative distal tip in relation to a longitudinal axis of a support member, as discussed above with respect to claim 1. Thus, for at least this reason, the Applicant respectfully submits that Kami does not anticipate, nor render unpatentable, claims 21-23. The fee for the new claims is \$150 (3 additional dependent claims X \$50/claim in excess of 20).

In general, the Office Action makes various statements regarding the pending claims and the cited references that are now moot in light of the above. Thus, the Applicant will not address such statements at the present time. The Applicant expressly reserves the right, however, to challenge such statements in the future should the need arise (e.g., if such statement should become relevant by appearing in a rejection of any current or future claim).

If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited to contact the undersigned attorney. The Commissioner is authorized to charge any necessary fees, including the \$150 fee for claims 21-23, or credit any overpayment to Deposit Account 50-2401.

Respectfully submitted,

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